

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017135**Date Inspected:** 16-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China

<b>CWI Name:</b>	Mr. Geng Wei		
<b>Inspected CWI report:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A

<b>CWI Present:</b>	Yes	No
<b>Rod Oven in Use:</b>	Yes	No
<b>Weld Procedures Followed:</b>	Yes	No
<b>Verified Joint Fit-up:</b>	Yes	No
<b>Approved WPS:</b>	Yes	No
<b>Delayed / Cancelled:</b>	Yes	No
<b>Component:</b>	OBG Bike Path and Segment	

**Bridge No:** 34-0006**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Magnetic Particle Testing (MT) – NWIT Document No's: 006679

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. BK005A4-001-024,075,076,050,009
2. BK005A3-001-005
3. BK005A6-001-023,024,035,036

Ultrasonic Testing (UT) – NWIT Document No: 006685

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13AE at Bay 14. The weld designations reviewed are as follows:

1. SEG3007AD-011, 012

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### Bay 14

This QA inspector observed ZPMC qualified welding personnel identified as 067876 perform Flux Core Arc Welding (FCAW) Welding on the K-plate of OBG Segment 13AE, weld joint identified as KP3001-001- 004 and 008. ZPMC QC is identified as Mr. Wang Xu. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 067079 perform FCAW Welding on the K-plate of OBG Segment 13AE, weld joint identified as KP3002-001- 001. ZPMC QC is identified as Mr. Wang Xu. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

This QA inspector observed ZPMC qualified welding personnel identified as 048047 perform Shielded Metal Arc Welding (SMAW) welding on OBG Segment 13AE Bottom plate temporary attachment areas, the bottom plates are identified as BP3030, BP3031, BP3032 and BP3033. ZPMC QC is identified as Mr. Guo Xing Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-1G (1F)-Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-1833. See the attached pictures.

This QA inspector observed ZPMC personnel performing Ultrasonic Testing (UT) on OBG Segment 13AE side plate. The weld joint is identified as SEG3007AE-004. ZPMC QC is identified as Mr. Wang Xu.

### Bay 19

This QA inspector observed ZPMC qualified welding personnel identified as 062738 perform FCAW on Bike Path, weld joint identified as BK004A3-014-025 and 026. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 062761 perform FCAW on Bike Path, weld joint identified as BK004A4-014-014 and 015. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 062841 perform FCAW on Bike Path, weld joint identified as BK004A5-008-090. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-Tc-U4b-F.

### OBG Segment 12BE

This QA inspector observed ZPMC qualified welding personnel identified as 054013 perform Shielded Metal Arc Welding (SMAW) welding on the drain plate of OBG Segment 12BE, weld joint identified as OBE12C-006 and 007. ZPMC QC is identified as Mr. Wu Shi Gao. The welding parameters as measured using QC's calibrated

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instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

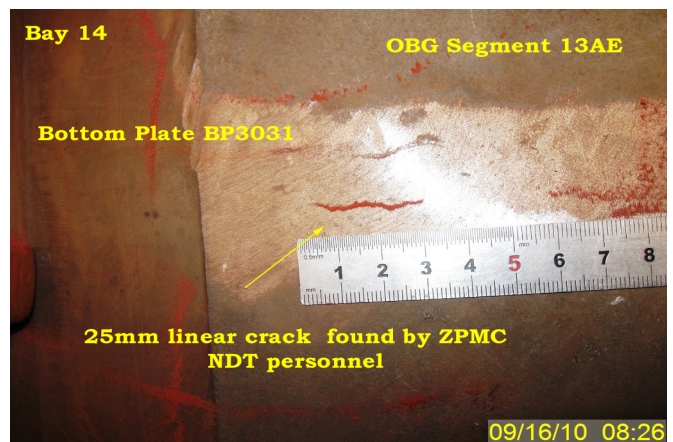
This QA inspector observed ZPMC qualified welding personnel identified as 043661 perform SMAW welding on OBG Segment 12BE, weld joint identified as OBE12C-006 and 007. ZPMC QC is identified as Mr. Wu Shi Gao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-3G(3F)-repair, which is used as per Welding Repair Report (WRR) B-WR15078.

### Visual Inspection after Blast

#### Segment 11BE

This QA Inspector performed a preliminary random visual inspection on OBG Segment 11BE, after the grit blast of the interior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection. See the attached pictures.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Vibin	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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